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THE NATIONAL CITY BANK OF NEW YORK

1929

Economic Conditions
Governmental Finance
United States Securities

New York, November, 1929.

General Business Conditions

THE collapse of stock speculation has overshadowed all other events in business during the past month. Violent as has been the decline and serious as have been the losses of individuals, we do not believe the fundamentals of the business situation have been changed. The losses have been losses to individuals, not losses reducing the country's productive capacity. The country's farms, mines, mills and factories are intact.

The losses and gains of individuals in the stock market are at each other's expense, not affecting the aggregate wealth of the country. They arise out of a redistribution of ownership in the corporations, and while it is deplorable that redistribution should occur in such a ruthless manner, the industries themselves are only incidentally affected.

The high prices that have ruled on the stock exchange have not been the cause of business activity, but a reflection of it, magnified by more or less extravagant expectations which induced the speculating public to extend itself beyond its means. While reports of slackening business in certain lines of industry may have been one factor in the final break, the main cause was in the condition of the market itself. All over the country general business is proceeding in a healthy and orderly fashion which is in marked contrast with the chaotic conditions in the stock market.

Recent reports from the industries have been favorable, indicating that a confidence is unimpaired. The accumulation of stocks in the automobile industry and slowing down of production is fully accounted for in the record-breaking activity of the first half of the year, and such decline as has occurred in the steel industry is accounted for by the slackening in automobile production.

For the past year the growing stringency in money has been the chief source of anxiety in the minds of competent authorities, and this situation is now promised relief by a subsidence of the abnormal demand for speculation.

That consumer purchasing power will be hurt in numerous individual cases of course is true, but observation has taught that whether the misfortune be a hurricane, a great conflagration, or a stock market crash, the first impressions almost invariably exaggerate the true extent of the damage. Never before in the history of the country have our industries been better fortified as to cash, condition of inventory, or soundness of corporate structure. There has been no inflation of commodity prices to require correction; no crisis in the banking system to aggravate the situation.

Moreover, it must be remembered that much of the business of the country is devoted to constant rebuilding and improvement of the industries, and thus not immediately subject to temporary changes in individual pocketbooks. Our factories, our railroads, our utilities, our farms, and our cities are undergoing a continuous process of development and modernization, involving billions of dollars of annual expenditures. Mention need only be made of such projects as the electrification programs now being carried out by the Pennsylvania, the Reading, and the Lackawanna railroads; the general program of railway equipment buying now shaping up in the largest volume in five years; the announced plan of the United States Steel Corporation for a $100,000,000 addition to its facilities in the Chicago district, and a similar large program of expenditure by the Bethlehem Company; the expansion program of our telephone system calling for upwards of $1,900,000,000 of expenditures over the next five years; and the vast programs of public improvements under way in New York and other leading cities.

This sort of work, dictated by economy and the needs of a steadily growing population, will go forward for the most part regardless of stock market fluctuations. Calling as it does for large amounts of capital, it should receive additional impetus from the lowering of money rates which promise a revival of the bond market, an improved mortgage market for building operations, and a new incentive to enterprise generally.

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Gain in Business Profits

With the publication of corporation earnings statements covering the third quarter it is now possible to see in tangible form the results of the high rate of business activity that was maintained. Similar figures for the nine months will aid in estimating what will be shown by the annual reports to be published after the turn of the year. We are presenting below a tabulation which has been prepared from all available reports published by corporations, with comparative figures for the corresponding periods of 1928. Net profits are taken after all charges but before any dividends, except in a few instances where the companies do not make adjustments for depreciation, tax reserves, etc., until the year-end statements, and in the case of the railroads and other utilities the net operating income is used.

Classification has necessarily been limited to broad industrial groups and therefore furnishes a representative picture of American business in its various divisions, even though many an individual company may be found whose showing will be contrary to that of its group. Financial organizations, such as banks, insurance companies, investment trusts, etc., are not included.

It will be observed that the combined net profits of the approximately 600 companies whose reports are available for the third quarter amounted to $1,142,302,000 as compared with $1,001,244,000 in the third quarter of 1928, representing a gain of $141,000,000 or 14 per cent. In the first nine months the same aggregation of companies had net profits of $3,223,620,000, which compares with $2,679,934,000 in the corresponding nine months of 1928 and represents a gain of $543,000,000 or 20 per cent. This showing is excellent in itself, but must be regarded as particularly impressive considering the fact that the comparison is with 1928, a year that surpassed all previous records in earnings.

An examination of the major industrial groups shows that in twenty-one out of twenty-seven the combined profits in 1929 were larger than in 1928 for both the third quarter and nine months periods. Excluding the railroads and utilities, the manufacturing and trading companies had combined net profits in the third quarter of $450,645,000 which compares with $389,398,000 in the third quarter last year and represents a gain of 15 per cent. For the first nine months this year these companies earned $1,315,983,000 compared with $1,039,655,000 in the same period last year, represent-

AMERICAN CORPORATION EARNINGS

Summary of Net Profits in Published Reports Covering Third Quarter and Nine Months (000's omitted)

No.	Industry	Third Quarter 1928	Third Quarter 1929	Per cent Change	Nine Months 1928	Nine Months 1929	Per cent Change
5	Amusement	$ 4,347	$ 8,715	+100.2	$ 12,399	$ 20,516	+ 65.5
2	Apparel	184	124	— 32.6	533	732	+ 37.3
16	Automobile	111,127	90,853	— 18.2	327,484	318,981	— 2.6
20	Auto Accessory	12,332	11,019	— 6.5	33,721	49,070	+ 45.5
10	Building Material	9,279	8,928	— 3.8	21,803	25,503	+ 16.9
11	Business Equipment	4,081	4,890	+ 19.9	10,150	13,554	+ 33.5
17	Chemical and Drug	38,578	43,137	+ 11.8	101,399	120,980	+ 19.3
6	Coal and Coke	1,293	1,761	+ 36.2	3,481	4,666	+ 34.0
12	Electrical	23,142	31,267	+ 35.1	58,428	78,221	+ 33.9
6	Flour and Baking	6,033	8,223	+ 36.3	21,382	28,055	+ 31.2
17	Food Products	24,971	30,812	+ 23.4	68,990	77,136	+ 11.8
16	Household Goods	10,444	11,216	+ 7.4	26,505	30,265	+ 14.1
23	Iron and Steel	54,726	93,204	+ 70.3	138,983	265,394	+ 91.0
2	Leather	618	245	— 60.6	3,727	D-1,821	——
12	Machinery	5,554	6,775	+ 21.9	14,797	20,096	+ 35.8
8	Merchandising	4,656	4,999	+ 7.3	13,605	15,466	+ 13.7
14	Metal Mining	6,904	9,125	+ 32.2	21,400	30,476	+ 42.4
5	Paper Products	1,237	1,787	+ 44.4	3,802	4,139	+ 8.8
19	Petroleum	39,101	46,772	+ 19.6	79,963	117,068	+ 46.4
5	Printing and Pub.	6,464	7,060	+ 9.2	20,873	23,543	+ 12.7
3	Railway Equipment	8,489	9,491	+ 11.8	18,507	22,151	+ 19.6
5	Real Estate	803	1,109	+ 38.0	2,750	5,495	+100.0
5	Restaurant Chains	180	1,061	+ ——	3,021	3,698	+ 22.4
2	Shipping	976	1,928	+ 97.6	1,441	4,044	+180.0
5	Textile Products	3,120	3,107	— 0.4	3,288	3,982	+ 21.1
5	Tobacco	2,933	3,186	+ 8.6	7,042	8,265	+ 17.4
21	Miscellaneous	7,826	9,851	+ 25.9	20,181	26,308	+ 30.4
272	Mfg and Trading	$ 389,398	$ 450,645	+ 15.7	$1,039,655	$1,315,983	+ 26.7
182	Railroads	357,830	P-398,901	+ 11.5	819,855	P-962,248	+ 17.4
89	Tel. and Tel.	63,258	P- 69,516	+ 9.9	199,208	P-214,649	+ 7.8
95	Other Utilities	190,758	P-223,240	+ 17.0	621,216	P-730,740	+ 17.6
638	Grand Total	$1,001,244	$1,142,302	+ 14.1	$2,679,934	$3,223,620	+ 20.3

D—Deficit P—Preliminary

ing a gain of 26 per cent. A checking over of the individual corporation reports reveals that in the third quarter 74 per cent of these companies showed increases and 26 per cent showed decreases as compared with the same quarter a year ago, while for the nine months period 88 per cent of the companies showed increases over last year.

Steel and Non-Ferrous Metals

Referring to the earnings reports for certain particular industries and at the same time considering the prevailing conditions and prospects for those lines, it is found that the basic steel industry made one of the best gains of any group, amounting to 70 per cent in the third quarter and to 91 per cent in the nine months period. This includes United States Steel Corporation whose third quarter earnings increased from $29,886,000 to $51,575,000 and whose nine months earnings increased from $77,087,000 to $147,587,000. Bethlehem Steel Corporation, second largest producer, increased its quarter earnings from $4,273,000 to $11,385,000 and its nine months earnings from $12,187,000 to $32,197,000.

Steel mill operations after running at nearly 100 per cent of capacity for eight months were curtailed in October to around 80 per cent. Demands from the automobile industry have declined but this has been offset in some measure by heavy buying of rails, locomotives and cars by the railroads. Total steel ingot production in 1929 may be estimated at around 56,000,000 gross tons as compared with 49,865,000 tons in 1928, the previous record year. Prices of finished steel have weakened slightly but average higher than at this time last year.

Fourteen companies in the metal mining group show a gain in profits of 32 per cent for the third quarter and 42 per cent for the nine months period, which reflects the higher prices realized this year and the larger production as well. Copper has remained stabilized at 18 cents compared with 15½ cents a year ago, while lead and zinc are about the same as last year. Production of the non-ferrous metals was greatly expanded early this year and the subsequent curtailment to conform with consumption has kept the industry in a balanced and healthy condition.

The Automotive Industries

As early as six weeks ago the output of automobiles and trucks had equaled the previous full year's record of 4,358,400 vehicles made in 1928 and even allowing for a seasonal curtailment during the balance of the year the total 1929 output should approximate 5,600,000 units. Practically all of the increase this year is accounted for by the Ford Motor Company which in the first nine months of 1929 produced approximately 1,633,000 vehicles, including output of Canadian plants, as contrasted with only approximately 466,000 units in the first nine months of 1928 when the new model was getting into quantity production.

The Ford Company does not publish any statements of earnings but these may be calculated from the change in its surplus account on the balance sheet issued annually. Sixteen other manufacturers have now published their reports for the third quarter which show combined net profits of $90,853,000 in 1929 as compared with $111,127,000 in the third quarter of 1928, this representing a decrease of 18 per cent. For the nine months period the profits declined from $327,484,000 to $318,981,000 or by 2 per cent. General Motors Corporation reported a decline in third quarter profits from $79,267,000 to $70,988,000 and in nine months from $240,535,000 to $222,848,000. Chrysler Corporation reported a decline in the third quarter from $10,096,000 to $6,635,000 but profits in the nine months increased from $21,786,000 to $24,730,000. Of the fourteen other manufacturers, five showed a gain in third quarter earnings and nine a gain in nine months earnings.

Makers of parts and accessories appear to have fared somewhat better than the manufacturers of complete cars and out of twenty reports for the nine months all but one show a gain over last year, the combined increase amounting to 45 per cent. Results for the third quarter, however, were irregular and the combined profits decreased 6 per cent. Curtailment of automobile production in the final quarter of 1929 has caused a corresponding decrease in demand for equipment but reports for the full twelve months should be quite satisfactory. Increased activity is looked for when production on next season's models gets under way.

Record activity in the various automotive industries has maintained the rate of gasoline consumption around the usual 15 per cent annual increase and has improved conditions in the oil industry despite the problems of overproduction and price-cutting that have not yet been solved. Of nineteen petroleum companies that have so far reported, practically all show better earnings than last year, the third quarter gain being 19 per cent and the nine months' gain 46 per cent.

Tire manufacturers are closing a year of record volume and comparatively stable prices of crude rubber, contrasting with 1928 when a severe break in crude prices practically wiped out operating profits for the industry. Inventories of finished casings and tubes became rather high in midsummer but by holding production in check these were rapidly cut down and the situation is now so strong that moderate increases in list prices were made by leading manufacturers in October. It is under-

stood that the major portion of the increase in prices paid by the public will go to the dealers, many of whom have been operating on an unsatisfactory margin of profit and under very severe competitive conditions. Most tire companies, due to the seasonal nature of their business, do not publish quarterly statements and a comparative tabulation of earnings is, therefore, not available.

Building Construction

Preliminary figures covering building contracts awarded in October, compiled by the F. W. Dodge Corporation, indicate a total of approximately $460,000,000 in contrast with $597,100,000 in October, 1928, representing a decline of 23 per cent, while the contract awards in the first ten months of 1929 will amount to approximately $5,062,000,000 against $5,724,100,000 in the corresponding period of 1928, a decline of 11 per cent. This substantial recession in building has been caused almost entirely by tight money conditions which have made mortgages difficult to obtain at reasonable rates and have acutely affected the market for realty bonds. All sections of the country have witnessed declining building activity, and the slump has now spread from residential and apartment construction to office buildings, industrial projects, public utility works, and municipal improvements as well.

That the Wall Street jolt will benefit real estate appears to be the concensus of opinion among realty men, who expect that large amounts of money that have been invested or loaned in the stock market will now turn to the purchase of real estate or realty bonds and mortgages. With the return to normal money conditions the building industry will be in a strong position, for the retarded activity of the last year has resulted in demands for certain types of space that exceed the supply, especially in moderate priced residences and apartments.

Only ten concerns in the building materials industry have made reports to date and the showing is irregular for both the third quarter and nine months. Although their combined total for the nine months shows an increase of 16 per cent, this includes gains by companies dealing in tile, fire brick, asbestos, gravel, lumber and glass, against which decreases were suffered by concerns making cement and elevators. Pending the publication of a more comprehensive body of reports for the several branches of the building materials industry it may be said that in general conditions have not been satisfactory. Slackening of the nation's building program, price-cutting, competition, and a shift to "specialties" for exterior, roofing, woodwork, flooring, etc., have combined to unsettle the business in materials.

Machinery Trades Active

Record activity in manufacturing this year has brought good earnings to the companies supplying equipment and the combined net profits of twelve companies producing machinery, engines, tools, pumps, etc., show a gain of 21 per cent in the third quarter and 35 per cent for the nine months period. Practically all the reporting companies shared in this increase.

Railway equipment is classed as a special branch of the machinery industry, and the three companies so far reporting show a gain of 11 per cent of the quarter and 19 in nine months. In addition to freight car orders which this year to date amount to 88,500 and exceed any full year since 1924, locomotive and rail orders have also been unusually large in recent weeks. A single order last month by the Pennsylvania Railroad for 310,000 tons of steel rails for 1930 delivery, which with fastenings and accessories will amount to $20,000,000 was the largest rail order ever placed by any railroad. On the same day it was announced that the New York Central Railroad had ordered 206,430 tons of rails. Locomotive buying is featured by the continued trend toward larger freight engines, able to handle longer trains and make longer runs without stopping for coal and water. Last month the Pennsylvania authorized the construction of 100 mountain type locomotives to cost about $9,000,000 and in the last eight years this road alone has raised the number of engines having a tractive power of 50,000 pounds or more from 350 to 1,996.

Electrical manufacturing has continued to prosper as shown by an increase of 35 per cent in the third quarter earnings of twelve reporting companies and 33 per cent in nine months earnings. General Electric Company, leader in this group, increased its net earnings for the third quarter from $13,166,000 to $17,869,000 and for the nine months from $38,842,000 to $49,897,000. The radio division of the business has been excellent. Western Electric Company, which manufactures telephone apparatus, equipment for talking pictures, and a wide variety of small electrical appliances, estimates that sales this year will be 65 per cent greater than in 1928, and double those of 1927.

Only one agricultural implement company has so far reported and this shows an increase in earnings of 21 per cent for the nine months but a decrease of 7 per cent in the third quarter. Due to the drought in some sections, particularly the wheat districts where the combine is marketed, sales of farm machinery this Summer have not been quite up to expectations, but the leading companies nevertheless will show a moderate gain over last year. Exports of farm machinery have been record-breaking. For nine months ending Sept. 30,

they totaled $109,723,509, a gain of almost $20,000,000 over the same period of 1928. Shipments in September were $9,250,798, a decrease of about $4,000,000 from the August total, but an increase of $400,000 over September, 1928.

Textiles and Apparel

Not enough earnings reports are available covering the major branches of the textile industry to give a representative picture of conditions. Raw cotton prices are lower than a year ago and estimated production is larger, but the changes are small and will both serve to help the goods industry, which has had hard sledding during recent years and was threatened with over-production early this Summer. Improvement in the situation, especially in inventories is evident from the September figures of the Association of Cotton Textile Merchants of New York, which make the following favorable comparison with a year ago:

COTTON GOODS—THOUSANDS OF YARDS

	September	
	1928	1929
Production	253,688	268,611
Sales	387,151	371,485
Shipments	278,110	287,628
Stocks	417,245	345,043
Unfilled Orders	398,005	438,952

Prices of raw wool and woolen goods have been weak despite a prospective increase in consumption of woolen fabrics during the next year, for supplies in the sheep raising countries of the world are considered ample to meet requirements and imports into the United States recently have been stimulated in anticipation of higher tariff rates. There should be an increase in yardage consumed by the women's clothing industry as a result of style trends toward longer and fuller dresses, but demand for woolen products generally is still sub-normal and earnings of the mills are showing little improvement.

Silk manufacturing this year is expected to establish a new record, the consumption of raw silk in American mills for the first nine months amounting to 467,537 bales (133 pounds average) or a monthly average of 51,949 bales, compared with 47,593 bales in the corresponding period of 1928 and 45,916 in 1927. Production of women's full-fashioned hosiery during the nine months is estimated at 20 per cent above last year, while broad silks are reported to be in good demand with a favorable Spring trade indicated. Rayon production and sales show no change from their satisfactory rate of growth that has been maintained for several years.

Other Active Industries

Space does not permit a discussion of numerous other industries whose showing is highly favorable, judged both by the actual earnings realized so far this year and by the conditions which determine their future prospects. Chemical and drug manufacturers increased their earnings 11 per cent in the third quarter and 19 per cent in nine months. Paper and paper products companies increased 44 and 8 per cent in the two periods. Food products increased 23 and 11 per cent. Tobacco products increased 8 and 17 per cent. Coal mining increased 36 and 34 per cent, and may be expected to eventually readjust itself to changed conditions and to reduce costs through complete mechanization of mines. Leather tanning suffered from a break in hide prices early in the year but conditions are better now and the shoe business continues satisfactory.

Earnings of the railroads and public utilities, which are not usually referred to as industries but which measured by capital investment, labor employment, and revenues, are far larger than any industrial line, are setting banner records in earnings this year. Net operating income of the Class I railroads for the first nine months of 1928, with September partly estimated, amount to $962,248,000 and represent a gain over the corresponding period in 1928 of $142,000,000 or 17 per cent. Traffic in the late Summer and Autumn has been curtailed on roads located in the Northwest and certain other sections due to congestion of grain at terminal warehouses, but for the country as a whole a new earnings record in the full year is assured. Ninety-five large public utility systems, furnishing electricity, gas, water, steam, etc., had combined earnings in nine months of $730,740,000, which was $109,000,000 or 17 per cent higher than last year. Telephone and telegraph company's earnings have a steady growth but at a lower rate than other public utilities and averaged a 7 per cent gain this year.

The Rise and Fall of Stocks

The recent course of events in the stock market appears but the latest rehearsal of an old familiar story. Founded upon a remarkable national prosperity, and aided in the beginning by easy money, the bull movement gained a momentum which carried it headlong past all danger signals. Ordinary measures of restraint proved inadequate to check its impetuous course. The mounting volume of credit employed in carrying securities, the rise in open market money rates to the highest levels in years, successive advances of Reserve bank discount rates, and the dislocation of foreign money markets caused by the drain of funds to this center, were all alike ignored in the enthusiasm of the moment.

The bull market had a good many vicissitudes in the period from 1921 to the Fall of 1924, when the election of Calvin Coolidge to the Presidency in this country and the settle-

ment of the reparations question in Europe cleared the way for the greatest period of prosperity, capital accumulation and credit expansion ever known. The demands of war finance had placed interest rates upon an abnormally high level, which meant that all outstanding securities carrying interest or dividend rates on the pre-war level had low capital values. As capital accumulated and interest rates tended downward, the market value of this body of outstanding bonds and stocks tended to rise, and this was the beginning of the upward movement. The heavy imports of gold quickened the downward tendency of interest rates and the upward tendency of prices on the exchanges. The general depreciation in the value of money as compared with labor and all property values exerted an influence for higher prices for stocks, representing property values.

These were the original influences behind the movement, but the growth of capital, the expansion of credit and the manifest results of improvements in business organization and methods have been potent forces in sustaining it.

Not All Due to Speculation

It is a grave mistake to think that the great rise of stock values in recent years has been without any sound foundation, or due to mere speculative fervor. Despite exaggeration there has been a solid basis of achievement, as shown by the review in preceding pages, of corporation earnings in the first three-quarters of this year. During the past decade leading corporations, such as those whose stocks are listed on the New York exchange, have gained very greatly in wealth and earning power. These stocks represent the leading industries of America. The companies are the survivors and exponents of the evolution and development in business methods which has been going on in this country over the last thirty years. They are the embodiment of what has been accomplished in proficiency and economy by the genius of invention and organization during this marvelous period.

Complaints have been common in recent years that while business was in great volume, prosperity was by no means general. The term "profitless prosperity" was descriptive of the general situation. Thousands of old business houses were passing out of the scene. Consolidations and reorganizations were the order of the day. Vast investments were being made to secure economy in production and distribution, all tending to the concentration of operations. The capital for this development has been provided either by profits resulting from the new processes and methods or by the sale of securities, (in recent years principally stocks) distributed through the stock exchanges. The corporations leading in this development have been prosperous and in numerous cases a new vista of expansion has been opened up which appealed powerfully to the imagination. A "new era" indeed seemed to be dawning. In truth many conditions were changing, and the strength and earning power of many of our business enterprises are so much greater than formerly that their securities are justly rated at a higher valuation.

Admitting all this to be true it is nevertheless a fact that movements of this sort almost invariably go too far. The stockholders of course were stirred by the developments which have just been described. They bought more stocks and as prices rose the incentive to buy increased. No matter how substantial the prospects of a business may be there is a point beyond which they cannot be profitably discounted, but mass movements are not based on careful calculations. They are dominated by the single purpose to get there first, or in the case of stocks to get them before they go higher or lower.

It has been demonstrated over and over again that whenever a market for anything is dominated by buyers who are paying little or no attention to intrinsic values, but are actuated solely by a speculative purpose, and guided by what other buyers of the same type are doing, the situation is dangerous. Even good stocks may be carried too high by buying of that class, particularly when it is done on borrowed money, and it is inevitable at such a time that a great many stocks of inferior merit will be carried along to an importance in the market far beyond their deserts.

Development of the Bull Market

As long ago as the Spring of 1928, it seemed to conservative observers that the bull market had gone about to the limit. Past experience had taught that the credit supply is a fundamental factor in a prolonged advance of prices, either of stocks or commodities. A continued demand, with rising prices and an unusually large volume of turnover never is financed by ready cash, but always signifies the use of credit. And the supply of bank credit has certain definite limitations based upon cash reserves.

Up to the middle of 1927, the banking reserves of this country were increasing continuously and rapidly by reason of importations of gold. The countries of Europe had been off the gold basis, the American dollar was the most stable currency in the world, and, in addition to a heavy balance of payments in favor of this country, capital was sent here from many countries for safe-keeping and reserves. This inflowing tide of gold enabled the banks to constantly increase their loans, and thus another great impulse to the rising stock market was given. If the credit had not gone into stocks it would have been

used somewhere else and an inflation of commodity prices would have resulted in greater wreckage than that surveyed today.

In the Fall of 1927, however, the gold tide turned outward. The year had been one of relatively low money rates in the United States. In August the Federal Reserve Bank of New York, actuated by a desire to stimulate domestic business, then showing signs of recession, to facilitate the Fall exportation of commodities, and to assist European countries struggling to establish themselves firmly on the gold standard, lowered its discount rate from 4 to 3½ per cent. In the international money market the effect of this action was to shift the burden of financing the Fall crop movements from London to New York, encourage the flotation of foreign securities in this market, and set up a flow of funds from New York to foreign centers which eventually led to gold exports. Between September 1 and the end of July, 1928 the net movement was approximately $500,000,000.

The Beginning of Tight Money

That a partial redistribution of the huge stock of gold accumulated in this country during and after the war was in the interest of general world stability and the restoration of normal international credit relations, was the view of bankers and economists generally, not only abroad but in this country, where the redundant supplies of the metal were looked upon as the basis of a constant threat of inflation. At the same time it was not to be supposed that so important a change in our credit relations with other countries could take place without affecting the situation at home. The tide of gold which had constantly replenished bank reserves in previous years was now no longer towards, but away from, this country. While the large amount of reserve lending power in the Reserve banks provided assurance against a shortage of credit for ordinary commercial purposes, it was one thing for the Reserve banks to protect business from the effects of gold exports and quite another thing to attempt to satisfy stock market demands, with their capacity for indefinite expansion. As to the latter the Reserve authorities soon gave notice that they had no intention of attempting it.

The member banks adapted their policies to the policy of the Reserve banks, not only in conformity but because they recognized that a fundamental change had come over the situation. Bankers and financiers familiar with conditions generally accepted the turn of the gold tide as a determination that credit would have to be conserved, and that the stock market would have trouble in finding funds for a further general rise of prices.

The stock market had made a great advance, discounting future earnings to a liberal extent, but the action of banks was not primarily in judgment upon stock prices but upon the credit situation, having regard for the maintenance of an ample supply of credit for regular business at reasonable rates. The expansion of credit had been continuous since 1922, as indicated by the following table showing the growth of total loans and investments of the member banks of the Federal reserve system during the period:

LOANS AND INVESTMENTS OF REPORTING MEMBER BANKS
(000,000 omitted)

June 30	
1922	$15,188
1923	16,543
1924	16,969
1925	18,710
1926	19,816
1927	20,590
1928	22,005
1929	22,407

Moreover, of this increase in total credit, an overwhelming proportion represented loans on, or investments in, securities. This is shown by the next table comparing the component items in the increase in member bank credit from 1922 through 1929:

LOANS AND INVESTMENTS OF REPORTING MEMBER BANKS
(000,000 omitted)

	June 30 1922	June 30 1929	Increase
Commercial Loans	$7,033	$9,139	$2,106
Security Loans	3,750	7,539	3,789
Investments	4,406	5,729	1,323
Total	15,189	22,407	7,218

At this point it will be interesting to observe the course of loans to brokers, secured by stocks and bonds, made by the New York City members of the Federal Reserve System, as reported by them to the Federal Reserve Bank of New York at the dates given:

NEW YORK BANK LOANS TO BROKERS AND DEALERS
(000,000 omitted)

1928	For Own Account	For Out-of-Town Banks	For Others	Total
January 4	$1,511	$1,371	$ 928	$3,810
June 6	1,167	1,642	1,755	4,564
June 27	941	1,483	1,754	4,178
December 19	1,030	1,750	2,331	5,111
1929				
March 20	1,091	1,768	2,934	5,793
April 17	877	1,662	2,886	5,425
June 26	1,038	1,536	2,969	5,543
September 4	1,103	1,784	3,467	6,354
October 16	1,095	1,831	3,875	6,801

The Federal Reserve Bank of New York advanced its discount rate from 3½ to 4 per cent in February, 1928, to 4½ in May, and to 5 in July, the last named rate standing until August, 1929.

The New York banks curtailed their brokers' loans in the first half of 1928, and alarm over

the money situation caused a sharp market reaction early in June, with a reduction of the total of brokers' loans from $4,563,000,000 on June 6 to $4,178,000,000 on June 27. Another sharp reaction occurred in March 1929, when the aggregate of loans declined from $5,793,000,000 to $5,425,000,000 at the low point on April 17. In May there was another drop after which the loans maintained a fairly steady movement upward until October.

After the slump in June, 1928, confusion in the market existed for some time. With the banks of the country already loaned up to the limit of their own resources, with the country's banking reserves no longer being augmented as in previous years, and with the policy of the Federal Reserve banks opposed to the use of Reserve credit for stock market purposes, it seemed as though the bull market was up against obstacles which it could not surmount. That it did persist and succeed in spite of them may be said to have been due to blind enthusiasm and the momentum of a great buying movement rather than to any accurate knowledge of conditions. There was no end of confidence on the bull side, and high interest rates proved to be no deterrent. There was continual talk that money soon would be easier, that the Reserve authorities would change their policy, that gold would come back to the country, etc.

Of course it is always true that high interest rates will attract capital. Not because great sums of capital are idle, but because there are great sums of liquid capital which can be shifted from where they pay only moderate returns to where higher returns can be had. Just how fast it would be shifted, what rates would have to be paid to get it, and what the effects of the shifting would be on industry and trade, of course nobody knew. Also there was the question of how large a portion of the bull contingent would have the courage under conditions of increasing strain to pay high interest rates in order to carry stocks which were far from carrying themselves.

However, the market went forward. Money did not get easier; on the contrary interest rates rose higher and higher, but they brought in the sinews of war from the most remote regions of this country and the most remote countries of the world. Furthermore confidence and prices sustained each other and rose together.

Where the Money Came From

Where did all the buying power come from? For one thing, the bond market has been practically dead for over a year, as regards either domestic or foreign issues. As a rule such industrial bonds as have been issued have been made attractive by means of some kind of privilege for conversion into stock. Furthermore, the banks, in order to meet the demands coming upon them from all sides, both on account of security loans and loans to business and industry, have been forced to substantially reduce their own bond investments. During the past year the decline in such holdings by the weekly reporting member banks has amounted to $558,000,000, or 9.4 per cent, an amount which somewhat more than offsets the increase of commercial loans during the period. If returns could be had from all banks, the proportion of total assets of the reporting banks to all banks indicates that the total reduction of bank investments would be approximately $1,500,000,000.

Normally the banks of this country have a steady growth of deposits from year to year, corresponding to the growth of wealth and business. In the past year deposits have been practically stationary, the accumulations of liquid capital having gone to the market, mainly through loans "for others." Attracted by the call rates ruling at New York, holders of surplus funds all over the country have been withdrawing them from the banks and sending them to New York for loan in the market, thus stripping the local banks of deposits, forcing them into the Reserve banks or curtailing their ability to supply the credit needs of their communities. Through its alternative inducements, i.e., either to make quick money buying stocks or to obtain unusual interest rates, the stock exchange was a powerful magnet for funds.

That the high interest rates did not affect industries more seriously or quickly is accounted for in various ways. In the first place, the banks have constantly given the preference to their regular business customers, and not until recently have rates to them gone above 6 per cent, which is not an oppressive rate in times of good business turnover. In the second place, practically all other speculative activities have been suppressed. The real estate booms have subsided under the competition. The mining boom which was flourishing in Canada two or three years ago has subsided and all the side shows have folded up their tents. Industry has been well balanced and under great momentum, which means that it rides over obstacles which at other times might upset it. Finally, capital has been found for new enterprises by means of convertible bonds or direct stock issues, which have been readily taken because they participate in the possibilities of the future which have had so strong an appeal to the public.

One of the features of the period has been the action of numerous corporations in availing themselves of the opportunity to float stock issues to retire bonds, thus strengthening their corporate position. For certain types of enterprise, however, such as building, which is

dependent upon a bond and mortgage market, the shortage of funds has been a serious matter and resulted in a slowing down of operations. In the agricultural sections scarcity of money is reported to be interfering with cattle feeding activities and to have curtailed the sale of fertilizer. It is impossible of course to trace the effects of this extraordinary drain of funds from all communities of this country, but it cannot be doubted that it involved a curtailment of investments and activities of some kind in all cases.

Abroad, the effects of this market have been felt with increasing force upon the principal money markets. High rates and the spectacle of rising prices at New York have induced a flow of funds to this country which depressed the exchanges and turned the tide of gold once more in the direction of these shores. Notwithstanding the fact that this gold could ill be spared from European central bank reserves, $250,000,000, or approximately half of what was shipped abroad in 1927 and early 1928, has been returned. The largest single contribution to this sum came from Germany and what such a loss of bank reserves would mean to Germany need not be emphasized. Furthermore, Europe has been able to protect her reserves from further loss only at the expense of materially higher bank rates. The details of these rate advances were given in this Letter last month.

The close relations of Canada with this market caused such a drain of funds from there that the authorities considered it advisable to place an embargo upon gold shipments, with the result that exchange on New York is at a premium of approximately 1.25 per cent. This means that Canada for the time being is off the gold basis. Argentina after losing approximately $65,000,000 in gold to the United States this year resorted to the same policy as Canada, allowing her own exchanges to sink in value. The discount in comparison with the dollar is about 1¼ per cent.

To sum up, the theory held by the sanguine market leaders, that money could be had by bidding for it and that the market could be carried much higher, proved to be in itself well founded, but whether in the light of today the victory over reason, experience and the banking authorities was worth while, the reader may answer for himself.

Attitude of the Banking Authorities

That the rise of prices has not been financed by the banking authorities, is well known by all who have been close to the situation. The figures for brokers' loans of the New York member banks, given above, show that the brokers' loans by these banks have been reduced since the beginning of 1928. Their participation since then has been largely for the purpose of steadying interest rates to prevent fluctuations so violent as to be disturbing to the entire money market.

Both the Reserve and Member banks have been under criticism, not only by parties immediately concerned in the market, but by numerous business men and professional economists of standing, who have charged that the banks were attempting to exercise an authority which did not belong to them and by so doing were responsible for the rise of interest rates, to the injury of business both at home and abroad.

Foreign criticism was added to domestic criticism. It was urged in London and other foreign centers that the Reserve authorities were aggravating the situation by a restrictive policy. It was said that the gold imports of the United States were not permitted to have their natural and proper influence upon the credit situation in this country; in other words, that to a great extent they were used to liquidate member bank indebtedness at the Reserve banks, thus strengthening the latter when in comparison with European banks they were already strong. It was said that by this policy gold was being interned and lost to use, that the United States was not playing the gold standard game with other countries, but intensifying the scarcity of money and credit.

It cannot be denied that there was force in this argument, and it had no little support by high authority. Against this view, however, were (1) the fact that the Reserve system was intended primarily for the support of the trade and industry, and (2) recognition of the danger that once Reserve credit was released it could not be recovered except through a fall of prices, and that if the Reserve banks became extended during the boom they would be without the power to protect the banking and business situation in the event of a serious credit crisis. The Reserve authorities remembered the criticism which fell upon them in the great deflation of credit in 1921-22, when their ability to render effective aid was gravely restricted by the fact they were extended almost to the limit themselves. They had the grave responsibility of determining at least to their own satisfaction whether if they released credit freely with the purpose of lowering interest rates the effect might not be to add fuel to the flames of speculation, with the result that their reserves would be depleted without the desired result. They pursued the conservative course of protecting their reserves against a time of possibly greater need.

Undeniably, differences of opinion as to the best means of dealing with the situation have existed at times among the Reserve authorities and bankers who had the same general purposes in view. At every reaction in the market there were dangerous symptoms, indicating that reaction might develop into such a dis-

aster as finally came, and which all wanted to avoid. The hope always existed that the market would tire itself out and eventually recede gradually and in orderly manner, or by a series of moderate breaks in which the stocks of merit would be distinguished from those over-valued, and a general debacle thus avoided. There has been much in the situation in recent months to encourage the belief that this might be the outcome. It is a notable fact that at last the market did not break for lack of credit, under the pressure of high interest rates, or by any act of authority, but under the pressure of voluntary selling. If it had been different, great would have been the outcry against the Reserve authorities and bankers.

The market fought its way upward against Reserve banks and member banks, and there was truth in the boast that it defeated them. Their purpose was not to control or dictate the policies or investments of individuals, but to defend their own position and conserve the credit resources. It is a commonplace, however, that bankers are not the owners of the funds in their custody, and the market defeated them by going around them and inducing depositors to place their funds at the service of "the street." Added to these funds were those attracted by high interest rates, or the lure of profits, from far and wide. Thus did the market win its way. Democracy triumphed over authority and leadership in the advance, and the orgy at the finish was all its own.

Factors in the Market Break

As has been said, the market broke on account of internal conditions, and under the accumulating weight of the adverse factors which had been present since the Summer of 1928. As prices advanced, the yields on the basis of dividends and earnings declined, while rising interest rates increased the carrying charges. Not much thought was given to costs so long as prices were rising, but the market became more selective, and an increasing number of stocks were showing no gains. By the middle of 1929 about one-half of the list was showing losses. Recovery from the March slump was slow and many did not recover at all. Brokers' loans did not get back to the high point of March until the middle of July. The unusual state of industrial activity in midsummer and the remarkable showing of corporation earnings in the first half year gave a new confidence, which was disturbed by a rise of $1,000,000,000 in brokers loans from July 1st to the end of September. The increase in brokers' loans, however, from May to October was very largely due to new financing, mainly through stock issues. An important part of the offerings consisted of stocks of investment trusts and trading companies, the latter a suggestive symptom of the time. In the first week of August the Federal Reserve Bank of New York raised its discount rate to 6 per cent, which gave the market another shock, but the rate on acceptances was lowered at the same time, and with continuing gold imports the money situation worked easier, notwithstanding the flood of flotations.

Throughout the Summer the credit strain in Europe was increasing, and the Bank of England was between the demands of the United States and the continent. From the middle of June to the last of September it lost about $165,000,000 of gold. In the latter part of September the firm of Hatry & Company, a large British brokerage and underwriting house, with many important connections, failed in London. So wide were the ramifications of the failure that the British market was severely shaken and there were heavy withdrawals of funds from this market. Inasmuch as a large part of these funds had been invested in securities, the movement was accompanied by a substantial selling of stocks by British interests.

On September 28 the Bank of England, which earlier in the year had raised the discount rate from 4½ to 5½, under pressure of the continued drain of gold, made the second advance to 6½ per cent, a development likewise calculated to induce and increase a movement of funds from this market to London. By this time Argentina and Canada had imposed embargoes upon gold exports for the express purpose of stopping shipments to this country. All signs indicated that the drain of funds to this market had about reached the limit, as other countries were bound to stop it, one way or another. Undoubtedly these conditions were influencing sentiment here.

The advance of the Bank of England rate was promptly effective, for the conditions were ripe for a movement of European funds from this market. Heavy selling from Europe occurred and the immediate rise of the foreign exchanges showed that funds were being transferred. The sales of course involved purchases here, and these were a factor in a further increase of brokers' loans.

The market had been showing increasing vulnerability by its susceptibility to sudden scares and the frequency of reactions. Furthermore, at this time reports came out that business in certain important lines was receding, the worst kind of news for the market. Confidence was unsettled, and as the feeling of uncertainty spread throughout the country and abroad the flow of selling orders increased into a deluge, while buying fell off, except as induced by falling prices.

The Psychology of Mass Movements

It would be idle to say that anybody predicted the breakdown just as it occurred, but it is well known that many experienced observers have considered the situation danger-

ous for more than a year. Not because of a sweeping judgment upon stock values, but because there is inherent danger in a great body of speculative property-holdings only partially paid for and subject to the varying conditions of the money market and general business activity. The very readiness and convenience with which trading in stocks is conducted through the exchanges, while advantageous as a means of obtaining wide distribution, makes the prices subject not only to changing business conditions, but to the changing psychology of the public toward such investments. The purchasers who buy for investment, pay for the stocks and take them out of the market are a stable element, but the traders who buy for a quick turnover and seldom or never take stocks from the market are mercurial elements and in such a period as the last five years the latter is the dominating element. These individuals are scattered far and wide, have little contact with each other or original sources of information, and of necessity are guided largely by current information, news reports, rumors, etc. They act from day to day. If stocks seem likely to go up they want more; if they seem likely to go down the impulse is to get out. They are influenced very much by the trend of general opinion as reflected in current prices. Evidently such a situation has in it all the conditions for a first class cataclysm. A pronounced movement either up or down, but particularly down, quickly acquires tremendous momentum.

A movement downward once started gains impetus from several sources. The favorite safety-device known as the "stop-loss" order, which is automatically effective a little below the market level and serves very well to limit an individual's losses in a normal market, is appallingly effective in helping a general slump to get under way. The trader who is operating on a margin is sensitive to alarms, and, finally, the lender closes out the account if the margin is exhausted—all of these influences accelerating the downward movement. Even the strong holder may sell his stocks in a downward movement with the purpose of getting in again at a lower level. On the other hand, the market's support is from the buyers who come forward as the declining prices appeal to their judgment. In a disorderly decline buyers are inclined to hold off to see how low prices will go.

It is evident from a study of the stock prices that the outstanding declines were in the stocks which had been the chief subjects of speculation. The issues of old and prosperous companies in many instances suffered greater losses than companies of relatively inferior repute and earnings, due to the former having been popular with speculative buyers whose holdings came on the market faster than they could be absorbed. Price-making was not based upon merit and calculation, but controlled almost wholly by the abnormal relations between supply and demand.

The action of sellers is spontaneous, every one acting for himself and under the spur of an urgency which buyers do not feel. The would-be buyer is making money while he waits. Moreover, in the confusion of a panic-stricken market, when the tape is an hour behind the transactions, the would-be buyer does not even know the ruling prices. All of the conditions are conducive to a slaughter of values.

These are the characteristics of all stock market crises as they have been known in the past, but many people had convinced themselves that the country had become so rich, and that information about stocks and their values was so generally distributed, that no such crisis would ever occur again. This one, however, has run true to form, on account of the vastly greater scale of operations, due to the very fact that so many more people were interested in the market than formerly, the volume of sales on the decline far exceeded anything ever known before.

It is interesting to check up on a number of other new theories which were confidently advanced during the bull movement. One of them was that the investment trusts and trading companies which constitute a new factor in the situation, would be an important stabilizing factor in an emergency, but whether because they were loaded up before the mass-selling began, or like other thrifty buyers preferred to stand aside until the bottom was reached, their influence was not apparent. Moreover their total resources are insignificant in comparison with the aggregate sales of this movement.

Broker's Loans

One of the most vexed features of the market situation over the past two years has been the growth of loans to brokers and dealers for account of "others," to which we have several times referred. Bankers regarded the development with suspicion, fearing that in any crisis these lenders would be subject to the mass psychology which was affecting the market, and that these loans would be another element of instability. This opinion elicited the comment that it expressed the natural dislike of bankers toward competition in their field. When the crisis came, these loans, as anticipated, proved to be an element of instability and weakness in the market, and many of them had to be taken over by the banks. Of course, their management in this critical time devolved almost wholly upon the banks.

The decline in the total of these loans in the week ended October 30, reached the unpre-

cedented total of $1,095,000,000. Extraordinary as was the total, the full magnitude of the adjustments that had to be made can be seen only after breaking down the figures into their component parts and examining them in connection with the changes shown at the Federal Reserve Bank.

In the following table we give the changes, classified as to whether placed for own account, for account of out-of-town correspondents, or for account of others,—the latter representing corporations, individuals, and other non-banking lenders:

Brokers' Loans of New York City Member Banks
(000,000 omitted)

	Oct. 30	Oct. 23	Change
For own account	$2,069	$1,077	+$ 992
For account of out-of-town banks	1,026	1,733	— 707
For account of others	2,443	3,823	— 1,380
Total	$5,538	$6,633	—$1,095

It will be seen that loans for "others" dropped $1,380,000,000 and for out-of-town banks, $707,000,000, making a total for the two groups of $2,087,000,000. On the other hand, loans of the same class by the member banks of New York City increased from $1,077,000,000 to $2,069,000,000, or by $992,000,000. The prediction that when trouble came the whole market would be on the doorsteps of the New York banks has been vividly realized. In this emergency, as in similar emergencies of the past, the burden of supplying the market fell squarely upon the New York banks. They saved the day by taking over the responsibilities of the fair-weather lenders and supplying credit with which stock purchases might be made. Without this action on their part the market would have had no rallying power.

Reserve Bank Operations

Back of the New York banks in the emergency stood the Federal Reserve Bank of New York whose operations in expanding credit provided the reserve funds which formed the basis of the member institutions' advances to the money market. At the New York Reserve bank alone, rediscounts during the week of October 30 increased by $139,000,000, and Government security holdings by $141,000,000, while holdings of bills bought in the open market declined by $23,000,000, this latter change reflecting the active demand in the open market for acceptances caused by a tendency for many lenders to shift stock market call loans into acceptances. All in all, the total expansion of credit at the New York Reserve bank amounted to $257,000,000, against $312,000,000 for the entire System. This expansion enabled the member banks to make loans to several times that amount.

All of which took place so easily and so smoothly as to leave no visible signs of the enormous shifting of funds taking place beneath the surface of the money market, call money lending at 5 to 6 per cent throughout the period.

The Recovery

One of the marked differences between this one, the greatest of market disasters on record, and all the others is that there has been no failure of a brokerage house on the big exchange and only two small failures on all of the New York exchanges. There has been no bank failure, nor have rumors of such been a factor in the situation. The outstanding feature has been the strength of the financial organization. Nobody has failed or been sold out for want of credit if he had approved collateral, and interest rates have declined rather than advanced, because the decline of prices released credit.

Unquestionably the known strength of the Reserve system was a reassuring factor of inestimable value. It was known that the member bank borrowings of the Reserve banks were very light and that the Reserve banks had steadily striven to keep their own credit out of the market. It is easy to see what this assurance has been worth as a salutary influence through the days of alarm.

In a crisis which is the culmination of a long bull campaign, it is evident that the supporting and stabilizing help must come from outside the market or from the members of the bear party who are ready to turn about. The bull party already is long of the market, and new buying power must be had. It takes time to attract the attention and convince the judgment of the multitude of potential buyers of the non-speculator type that the occasion has arrived when it is worth their while to gather up good collateral and take advantage of the bargains, but an army of that kind is soon on the ground.

The bargain-hunters buy with discrimination, upon information of the assets and earning power behind the stock certificates, and that kind of buying will soon restore the equilibrium. With an end of the frenzied buying which depended on borrowed money, but was indifferent to the rate of interest paid for money, the vast structure of brokers' loans may be expected to come down to normal proportions and credit will be cheaper for every purpose. The bond market will come back to its proper place in the financial system, and lower interest rates will not only enhance the value of bonds and preferred stocks, but bring all good stocks back to normal values.

Already pronounced symptoms of easing pressure upon the money markets are visible. The Bank of England has reduced its discount rate from 6½ per cent to 6 per cent. The Federal Reserve Bank of New York has reduced its discount rate from 6 per cent to 5 and its

buying rate on acceptances, 90 days or less, from 5 per cent to 4¾ per cent.

Crops and Prices

Killing frosts over nearly all of the farming sections have ended crop production for the year. Government crop reports upon conditions as of October 1st as a rule were more favorable than those a month earlier, owing to much needed rains in September. The September estimates of yields have undergone a moderate revision upward, and the Department of Agriculture composite estimate of aggregate production now stands at about 96 per cent of the 10-year average. So far as the purchasing power of the farm population is concerned, it probably will be as large as, and possibly larger than, the average, which, however, does not signify, as sometimes suggested, that the country is just as well off with a short crop as a large one. Consumers necessarily pay more to reimburse the farmers for short crops, hence will have less to spend in other directions. Nevertheless, the cost is spread over the entire population and on the whole the deficiency is not large enough to be serious.

The corn crop has been marked up 72,000,000 bushels over the September 1st estimate, but at 2,528,000,000 bushels is 300,000,000 bushels under the yield of last year and 200,000,000 bushels under the 5-year average. Drought was responsible for the short crop. The Kansas yield is officially estimated at 100,630,000 bushels, against 179,118,000 last year. The corn situation will affect meats and dairy products to some extent, but as there are good prospects for the corn crops in Southeastern Europe and the Argentine it is probable that our exports of this grain will fall off, leaving more for home consumption. Oats at 1,277,000,000 bushels are down 222,000,000 from last year and 118,000,000 from the 5-year average. On the other hand, barley, another feed crop, is 100,000,000 bushels above the 5-year average. Fortunately, good rains have provided fine Fall pasturage in the regions which suffered from the drought. The winter wheat fields of the Southwest are affording excellent pastures, and promising well for next year's wheat crop.

Corn is about 10 cents per bushel above the price ruling at this time last year and oats about 6 cents.

The Course of Wheat

The course of wheat prices has been downward, to the great disappointment of producers who have held for higher prices and speculators who bought during the great rise which overran $1.50 per bushel in July. The low point on the crop was touched on Thursday, October 24th, when the contract grade in Chicago dropped 12 cents to $1.14. This probably was due in the main to a crash in the stock markets which occurred on that day. Apparently, operators who were extended in both markets found it necessary to consolidate their positions, and the sacrifice may have been less in wheat than in stocks. All of the drop was recovered in the following two days, and the closing price of the December delivery on October 30 was $1.24¾.

The decline of wheat from the July range has been due to changing conditions which have very much modified the bullish sentiment then prevailing. For one thing, European crops have turned out quite well, almost equal to the large crop of last year, and over there, as well as in this country, the crop has been marketed rapidly, with the result that Europe has not been under pressure to buy overseas. Moreover, the European attitude toward the big price rise from June to July has been one of skepticism. Dealers have been indisposed to buy wheat or flour on that basis. Furthermore, Argentina and Australia, both of which harvested large crops early in this year, have been underselling the United States and Canada, while in the latter countries visible supplies have been accumulating until they are the largest ever known, and would have been larger but for the fact that storage space at the terminals has been full. On October 5th available warehouse stocks of wheat at important concentration points in the United States and Canada aggregated 380,581,000 bushels, against 230,739,000 bushels at the corresponding date of 1928. These stocks are still showing some increase from week to week, but at a diminishing rate, because of the scarcity of storage space.

This vast quantity of grain for the most part has passed from the ownership of the producer and is being carried by the speculative public, which has bought it on the grain exchanges in expectation of being able to sell it later at a profit. Practically all of it represents heavy losses to the holders at the present time. The regular houses in the grain trade, which buy at country railroad stations, have hedged their holdings by selling futures on the exchanges, and it is the purchasers of these holdings who are carrying the load.

The scarcity of storage room has caused an unusual spread between cash prices and prices for future delivery; in other words, cash prices are relatively lower because wheat is pressing for sale and there is a lack of storage room in the market places. Naturally, nobody wants to buy wheat if he has no place to put it. Undoubtedly this has been one depressing influence upon the price, affecting cash wheat, however, more than futures. As a result, complaints have arisen that the marketing system is not performing its functions properly, and the new Farm Board has been overwhelmed

with appeals for it to do something. In some quarters it has been charged that the grain trade was misrepresenting or mishandling the situation in some way, but an investigation by the Department of Agriculture has failed to sustain such allegations. The report explains that misunderstanding has developed from the fact that actual elevator holdings are always less than reported capacity, a condition necessary to the grading, cleaning, and mixing operations which elevators carry on. All bins cannot be full at the same time, and ordinarily 15 per cent of space is allowed for operating requirements. Percentages of capacity of public elevators in use on September 28 were as follows: at Chicago, 90.3; Kansas City, 92.6; Omaha, 85.1; St. Louis, 86.3; Minneapolis, 88.4; Duluth-Superior district, 82.5, etc. The report says that grain elevators in the Northwest had been working very close to capacity since September 1st.

World Wheat Supplies

The world's supply situation apparently has not changed much from the prospect which caused the dramatic rise of prices in June-July. The United States Department of Agriculture, which now maintains a very extensive crop reporting system all over the world, in a bulletin dated October 21, calculates world production, exclusive of Russia and China, as 3,900,000,000 bushels in 1928-29 and 3,400,000,000 bushels in 1929-30, or a falling off in new supplies of 500,000,000 bushels. On the other hand it estimates the carryover from the big crop of 1928-29 as 140,000,000 bushels larger than that from the crop-year 1927-28. Hence including the carryover, the world's total supply for 1929-30 is 360,000,000 bushels less than last year.

The Department of Agriculture estimates that the world carryover last July reached the huge figure of about 557,000,000 bushels. Of this United States and Canada held about 216,000,000 bushels, United Kingdom port stocks and the floating supply was 67,000,000 bushels and the remainder was scattered throughout the world. Assuming that this year's consumption will be about the same as that of last year, i.e., 3,760,000,000 bushels, the world carryover will be reduced to about 200,000,000 bushels, the lowest figures since 1923. It is doubtful if total stocks can be lowered to this point without creating a pressure that will raise prices, and if any more unfavorable news about the crop of the southern hemisphere should come out, or if the prospects next Spring for the 1930 crop should be unfavorable, a scramble for supplies might result.

Again we say that these comments on crops, carryovers and consumption are based on U. S. Department of Agriculture reports and that we accept them on the strength of their high authority.

The Canadian Pool

The Canadian wheat pool is acting upon the theory that a scarcity of wheat for the ensuing year actually exists, and is exerting its influence for holding back the crop. It justifies this policy not only by the estimates of production and requirements, but by the claim that while the Canadian crop is short in quantity it is of exceptional quality, and will all be wanted at higher prices.

The officials of the pool organization have been holding this position in the face of falling prices and despite criticism, expressing themselves as satisfied to allow other wheat to be marketed first and thus gotten out of the way. Total exports of wheat from Canada in August and September, 1929, were 17,566,075 bushels, against 51,979,947 in the corresponding months of last year, and it must be considered that while this crop is considerably smaller than last year's, supplies available for export, including the carryover, have been constantly larger than last year. For the same two months, exports of flour were down from 1,814,421 barrels last year to 1,135,627 this year, showing the indisposition of the foreign trade to buy on the price basis.

This restriction of the marketing movement is the uppermost subject in Canada. The railroads are suffering for traffic, the steamship lines are complaining about the lack of cargoes, manufacturers and merchants are disturbed by a slackening of trade and collections. The Canadian dollar had been for some time at a discount of approximately 1.25 cents in New York because the balance of payments was running against Canada and with the heavy demands on the banks to carry wheat it was thought inadvisable to allow the gold reserves to be depleted by exports. The break in prices on the New York Stock Exchange in the last week of October caused this discount to increase to 2⅜ per cent. Ordinarily, an exchange of ¼ per cent will move gold between Montreal and New York.

Summing Up the Situation

It looks as though the crux of the situation would come soon, for if Europe continues to get what it needs around present prices until the new harvest starts in Argentina and Australia in six weeks or two months, it may maintain its attitude of indifference much longer.

Our own information from Argentina is that a devastating drought prevailed until the middle of September. Since then general rains have fallen, and conditions have improved very much, but even so, the acreage is somewhat less than last year. The United States Department of Agriculture estimates

the crop at 215,000,000 bushels, against 307,000,000 last year.

The movement of wheat from the United States is now approximately equal to that of last year. On the whole, on account of the increased movement from Argentina and Australia, the total receipts of Europe from overseas have been running but little below those of last year.

Rye, which is an important bread crop in Europe, is in about the same supply as last year. The production of 18 countries is reported at 864,800,000 bushels, against 866,500,000 bushels in 1928.

Although there were some reports a few months ago of good crops in Russia, nothing has come out recently suggestive of exports. Such a movement might seriously affect the situation.

In conclusion, we are impressed that the decline of wheat has been due to a "tired feeling" on the part of holders, induced by the immense visible stocks and the continuing shipments from Argentina and Australia, together with the pressure of American wheat on the domestic market in the face of shipping and storage conditions which have been unfavorable to the price.

It is probable that the high prices prevailing in the early part of the harvesting season are responsible for the heavy marketing movement, farmers preferring to take a good price rather than hold at the risk of a decline. In view of past experiences they can hardly be blamed for this reasoning, but it is obvious that storage facilities at the central markets are not sufficient to care for the crop at this year's pace of marketing. Although it is doubtful policy to dump the crop on the speculative market in such haste, lack of handling capacity seems to have had more to do with the price decline than lack of buying power or speculative interest. Obviously the speculative markets cannot function without authorized storage facilities. Even government aid cannot be made effective without storage facilities.

An interesting feature of the situation as reported is that many farmers who sold their wheat bought futures at the same time, and sometimes in excess of their own sales. This confidence in the long-pull situation explains the unusual spread between cash wheat and futures, but tends to depress the cash market.

Loans by the Farm Board

The Farm Board has announced arrangements to make loans through the Farmers' National Grain Corporation, recently organized for the purpose, to cooperative wheat-growers' associations, supplemental to other borrowings, which it is stated will enable the farmer to obtain at once 90 per cent or better of the market price, and probably almost as much as he could obtain by sale to local dealers. A scale of prices is named which will be the basis of loans at certain concentration points. Following is an extract from the announcement:

The wheat cooperatives are now borrowing certain sums for advances to members from commercial banks, the Federal Intermediate Credit Banks and the Farm Board. The board will make supplemental loans to cooperatives in amounts equal to the following price schedule, taking into account the customary differentials:

Grade	Price Per Bu.	Basis
No. 1 White Amber	$1.12	Seattle
No. 1 Northern	1.25	Minneapolis
No. 1 Durum	1.12	Duluth
No. 1 Hard Winter	1.18	Chicago
No. 1 Red Winter	1.25	St. Louis
No. 1 Hard Winter	1.15	Kansas City
No. 1 Hard Winter	1.21	Galveston
No. 1 Hard Winter	1.15	Omaha

This schedule is based on a grade price and does not take into consideration premiums for higher quality of wheat.

In many sections of the country the board believes that the net advances which wheat cooperatives can make to their members under this loan plan will almost, if not quite, equal the amounts which are being paid by the speculators and others on actual purchases from farmers.

There is a grain cooperative in every wheat State. It is open to the membership of every wheat farmer. The farmer may join, ship his wheat to a designated concentration point, where it will be graded and cleansed, and draw his advance. The cooperative will market the wheat in orderly fashion through the year, and will settle with the farmer on the basis of the final price obtained.

The board is confident that considering the soundness of underlying conditions which affect the price of wheat, the plan described above furnishes a completely safe basis for making loans from the board's revolving fund. The board places no limit on the amount of government money to be so loaned. Nearly $100,000,000 is available for the purpose, and if necessary the board will also ask Congress to appropriate more.

The language of the announcement follows closely one of similar import relative to loans on cotton, made a few days before, and to which reference is made below. Although each of these announcements says that "the Board places no limit on the amount of government money which may be so loaned" the total amount which the Federal Farm Board Act proposed to place at the command of the Board was $500,000,000.